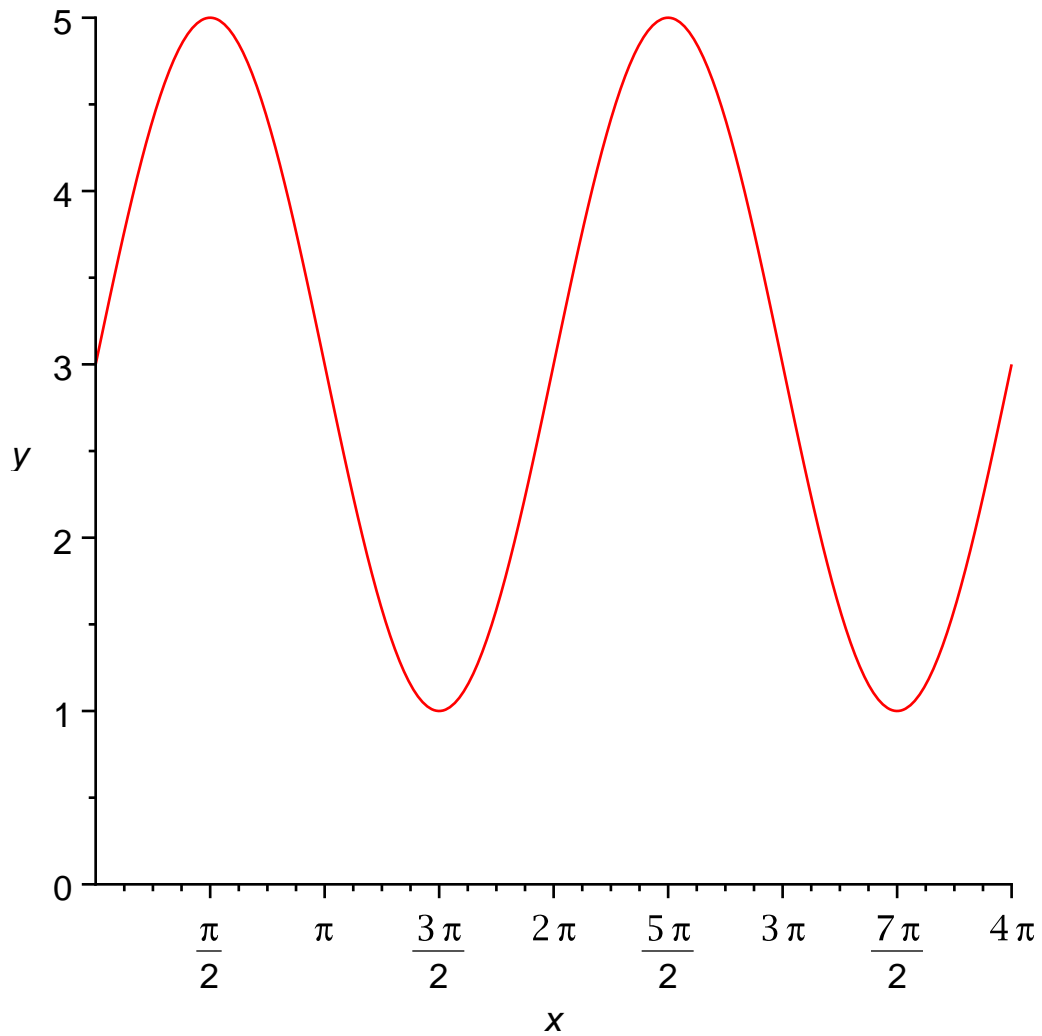
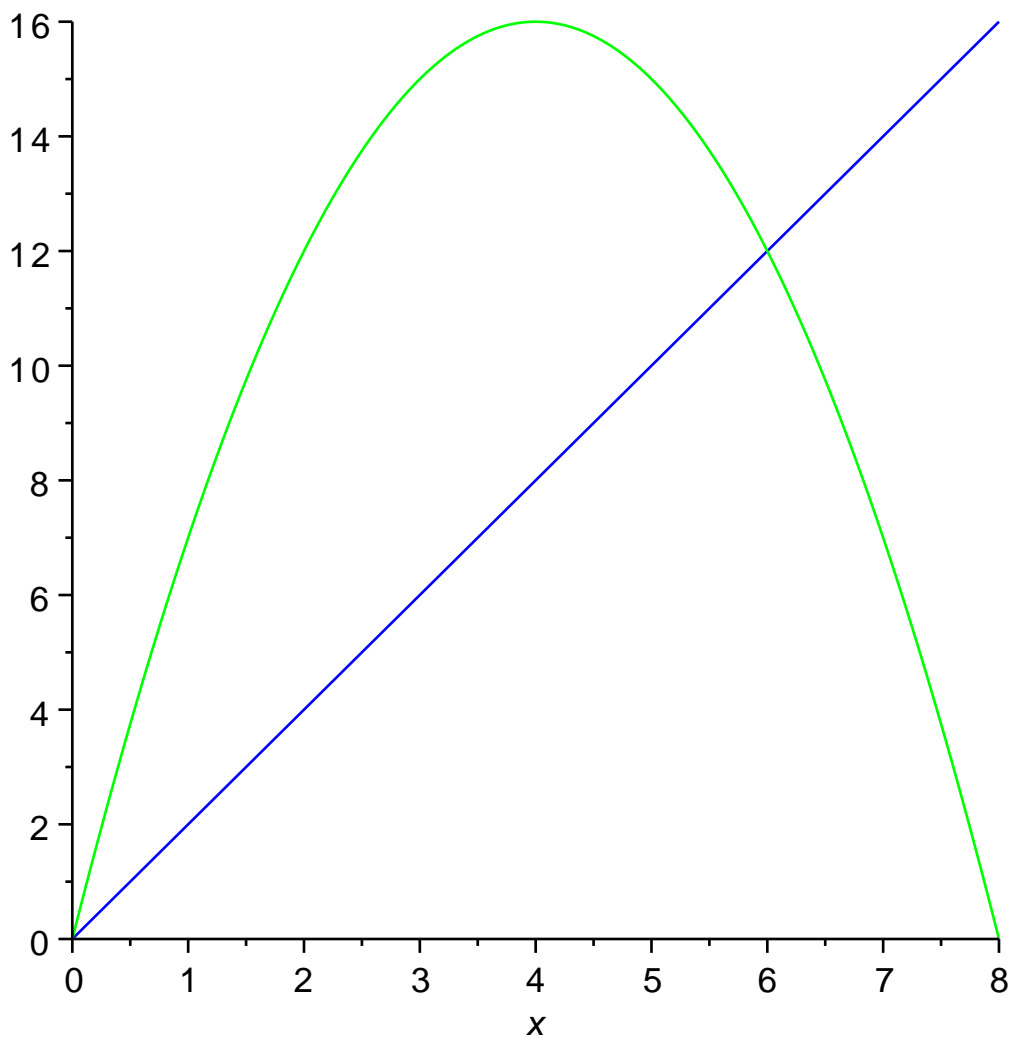


```
> with(plots):  
> f:=x->2*sin(x)+3;  
f:= x→2 sin(x) + 3  
> plot(f(x),x=0..4*Pi,y=0..5);
```

(1)



```
> p1:=plot(8*x-x^2,x=0..8,color=green):  
> p2:=plot(2*x,x=0..8,color=blue):  
> display({p1,p2});
```



```
> int(x^4/sqrt(9+x^2),x);
```

$$\frac{1}{4} x^3 \sqrt{9+x^2} - \frac{27}{8} x \sqrt{9+x^2} + \frac{243}{8} \operatorname{arcsinh}\left(\frac{1}{3} x\right)$$

(2)

```
> int((2*x+3)/(4+x^2),x=0..2);
```

$$\ln(2) + \frac{3}{8} \pi$$

(3)

```
> evalf(sqrt(13)+ln(7));
```

5.551461424 (4)

```
> solve(x^2+4*x-13=0,x);
```

$$-2 + \sqrt{17}, -2 - \sqrt{17}$$

(5)

```
> fsolve(x^3+4*x-13=0,x);
```

1.797665494 (6)

```
> with(combinat):
> for i from 1 to 10 do print(i,fibonacci(i)); od;
```

1, 1
2, 1
3, 2
4, 3
5, 5
6, 8
7, 13
8, 21
9, 34
10, 55 (7)

```
> sum( fibonacci(3*k),k=1..5);
```

798 (8)